

International Journal of

GENERAL SYSTEMS

Methodology ● Applications ● Education

List of Articles

Author Index

Subject Index

Volume 14

1988

GORDON AND BREACH SCIENCE PUBLISHERS INC.

LIST OF ARTICLES

VOL. 14, NO. 1

OSMOTIC GROWTHS: A CHALLENGE TO SYSTEMS SCIENCE by George J. Klir, Kevin D. Hufford and Milan Zeleny, pp. 1-17.

BIOLOGICAL OBJECTS AS THE FUNCTIONALLY ORGANIZED GENERAL SYSTEMS by Vladimir Majernik, pp. 19-32.

TREE-LIKE HIERARCHY OF SYSTEMS by Yi Lin, pp. 33-44.

SYSTEMS PERSPECTIVES IN APPLIED MECHANICS by Mehdi Farshad and Behrouz Tabarrok, pp. 45-58.

NETWORK FORMULATION OF THE FINITE ELEMENT METHOD by Ronald Christensen, pp. 59-75.

RYDBERG ATOMS, VARIABLE STARS, KEPLER THIRD LAW AND $E=h\nu$ by Robert L. Oldershaw, pp. 77-84.

VOL. 14, NO. 2

EXTENDED DEPENDENCY ANALYSIS OF LARGE SYSTEMS. PART I: DYNAMIC ANALYSIS by Roger C. Conant, pp. 97-123.

EXTENDED DEPENDENCY ANALYSIS OF LARGE SYSTEMS. PART II: STATIC ANALYSIS by Roger C. Conant, pp. 125-141.

LINEAR METABOLISM-REPAIR SYSTEMS by John L. Casti, pp. 142-167.

AN ESTIMATOR ALGORITHM FOR LEARNING AUTOMATA WITH CHANGING NUMBER OF ACTIONS by M. A. L. Thathachar and R. Harita, pp. 169-184.

VOL. 14, NO. 3

A HIERARCHICAL VIEW OF COMPLEX SYSTEMS by Yasuhiko Takahara, Junichi Iijima and Qunfei Zhao, pp. 201-237.

THE CONCEPT OF STABILITIES OF GENERAL SYSTEMS by Yi Lin, pp. 239-249.

A GENERALIZED VIEW OF NONMONOTONIC KNOWLEDGE: A SET OF THEORETIC PERSPECTIVE by Ronald R. Yager, pp. 251-265.

A GENERAL APPROACH TO THE CHARACTERIZATION OF CHANGES IN SYSTEM BEHAVIOR BY OUTPUT FEEDBACK by Toshio Saito, pp. 267-276.

VOL. 14, NO. 4

MEASURES OF ENTROPY IN THE THEORY OF EVIDENCE by Maria T. Lamata and Serafin Moral, pp. 297-305.

DECOMPOSITION PROBLEM OF FUZZY RELATIONS—FURTHER RESULTS by Waldemar Kołodziejczyk, pp. 307-315.

A METHODOLOGY OF COORDINATION IN JAPANESE COMPANY-WIDE QUALITY CONTROL by Syohei Ishizu, pp. 317-330.

TECTOLOGY by Milan Zeleny, pp. 331-343.

SOME PROPERTIES OF MODIFIED DEMPSTER-SHAFER OPERATORS IN RULE BASED INFERENCE SYSTEMS by Bernard P. Zeigler, pp. 345-356.

FOUNDATIONS OF *O*-THEORY: MEASUREMENTS AND RELATION TO FUZZY SET THEORY by E. M. Oblow, pp. 357-378.

AUTHOR INDEX

BANDLER, WYLLIS; see KLIR, GEORGE J.

BLAHUT, RICHARD E.; see KLIR, GEORGE J.

BURNS, TOM; see ZIEGENHAGEN, EDUARD A.

CARSON, EWART R.; see KLIR, GEORGE J.

CASTI, JOHN L.; Linear Metabolism-Repair Systems; No. 2, pp. 142-167.

CASTI, JOHN L.; see SKOWRONSKI, J. M.

CHRISTENSEN, RONALD; Network Formulation of the Finite Element Method; No. 1, pp. 59-75.

CLEMSON, BARRY; see JOSLYN, CLIFF.

CONANT, ROGER C.; Extended Dependency Analysis of Large Systems. Part I: Dynamic Analysis; No. 2, pp. 97-123.

CONANT, ROGER C.; Extended Dependency Analysis of Large Systems. Part II: Static Analysis; No. 2, pp. 125-141.

DONNER, MARC D.; see KLIR, GEORGE J.

DUBOIS, DIDIER; see KLIR, GEORGE J.

FARSHAD, MEHDI and TABARROK, BEHROUZ; Systems Perspectives in Applied Mechanics; No. 1, pp. 45-58.

FLAM, HELENA; see ZIEGENHAGEN, EDUARD A.

FLOOD, ROBERT L.; see KLIR, GEORGE J.

FOLGER, TINA; see NOWAKOWSKA, MARIA.

GORMLAY, LANE; review of *The Efficacy of the Symbolic*, Volume II: A Systems Model of Representation, written by Norman Lacharite; No. 2, pp. 187-188.

HARITA, R.; see THATHACHAR, M. A. L.

HUFFORD, KEVIN D.; see KLIR, GEORGE J.

IIJIMA, JUNICHI; see TAKAHARA, YASUHIKO.

ISHIZU, SYOHEI; A Methodology of Coordination in Japanese Company-Wide Quality Control; No. 4, pp. 317-330.

JOSLYN, CLIFF; review of *Cybernetics: A New Management Tool*, written by Barry Clemson; No. 1, pp. 85-86.

KAYE, MARLENE M.; review of *Systems and Control Encyclopedia—Theory, Technology, Applications*, edited by Madan G. Singh; No. 4, pp. 379-386.

KELLY, MICHAEL F., review of *Knowledge as Design*, written by D. N. Perkins; No. 3, pp. 283-284.

KLIR, GEORGE J., HUFFORD, KEVIN D. and ZELENY, MILAN; Osmotic Growths: A Challenge to Systems Science; No. 1, pp. 1-17.

KLIR, GEORGE J.; review of *Approximate Reasoning in Intelligent Systems, Decision and Control*, edited by E. Sanchez and L. E. Zadeh; No. 2, p. 189.

KLIR, GEORGE J.; review of *Computer Models of Speech Using Fuzzy Algorithms*, written by Renato De Mori; No. 3, p. 286.

KLIR, GEORGE J.; review of *Dealing with Complexity: An Introduction to the Theory and Application of Systems Science*, written by Robert L. Flood and Ewart R. Carson; No. 3, p. 285.

KLIR, GEORGE J., review of *Introduction to Logic for Systems Modelling*, written by Vaclav Pinkava; No. 3, p. 285.

KLIR, GEORGE J.; review of *Knowledge Representation in Medicine and Clinical Behavioural Science*, edited by Ladislav Kohout and Wyllis Bandler; No. 2, p. 188.

KLIR, GEORGE J.; review of *Possibility Theory: An Approach to Computerized Processing of Uncertainty*, written by Didier Dubois and Henri Prade; No. 3, pp. 279-280.

KLIR, GEORGE J.; review of *Principles and Practice of Information Theory*, written by Richard E. Blahut; No. 2, pp. 185-186.

KLIR, GEORGE J.; review of *Real-Time Control of Walking*, written by Marc D. Donner; No. 2, p. 189.

KLIR, GEORGE J.; review of *Statistics with Vague Data*, written by Rudolf Kruse and Klaus D. Meyer; No. 2, pp. 186-187.

KLIR, GEORGE J.; see NOWAKOWSKA, MARIA.

KOHOUT, LADISLAV; see KLIR, GEORGE J.

KOŁODZIEJCZYK, WALDEMAR; Decomposition Problem of Fuzzy Relations—Further Results; No. 4, pp. 307-315.

KRUSE, RUDOLF, see KLIR, GEORGE J.

LACHARITE, NORMAN; see GORMLAY, LANE.

LAMATA, MARIA T. and MORAL, SERAFIN; Measures of Entropy in the Theory of Evidence; No. 4, pp. 297-305.

LIN, YI; The Concept of Stabilities of General Systems; No. 3, pp. 239-249.

LIN, YI; Tree-Like Hierarchy of Systems; No. 1, pp. 33-44.

MAJERNIK, VLADIMIR; Biological Objects as the Functionally Organized General Systems; No. 1, pp. 19-32.

MEYER, KLAUS D.; see KLIR, GEORGE J.

MORAL, SERAFIN; see LAMATA, MARIA T.

MORI, RENATO DE; see KLIR, GEORGE J.

NOWAKOWSKA, MARIA; review of *Fuzzy Sets, Uncertainty and Information*, written by George J. Klir and Tina Folger; No. 3, pp. 277-279.

OBLOW, E. M.; Foundations of *O*-Theory: Measurements and Relation to Fuzzy Set Theory; No. 4, pp. 357-378.

OLDERSHAW, ROBERT L.; Rydberg Atoms, Variable Stars, Kepler Third Law and $E=hc$; No. 1, pp. 77-84.

PERKINS, D. N.; see KELLY, MICHAEL F.

PINKAVA, VACLAV; see KLIR, GEORGE J.

PRADE, HENRI; see KLIR, GEORGE J.

SAITO, TOSHIIO; A General Approach to the Characterization of Changes in System Behavior by Output Feedback; No. 3, pp. 267-276.

SANCHEZ, E.; see KLIR, GEORGE J.

SINGH, MADAN, G.; see KAYE, MARLENE M.

SKOWRONSKI, J. M.; review of *Linear Dynamical Systems*, written by John L. Casti; No. 3, pp. 281-282.

SKOWRONSKI, J. M.; review of *Nonlinear System Theory*, written by John L. Casti; No. 3, pp. 281-282.

TABARROK, BEHROUZ; see FARSHAD, MEHDI.

TAKAHARA, YASUHIKO, IIJIMA, JUNICHI and ZHAO, QUNFEI; A Hierarchical View of Complex Systems; No. 3, pp. 201-237.

THATHACHAR, M. A. L. and HARITA, R.; An Estimator Algorithm for Learning Automata with Changing Number of Actions; No. 2, pp. 169-184.

YAGER, RONALD R.; A Generalized View of Nonmonotonic Knowledge: A Set of Theoretic Perspective; No. 3, pp. 251-265.

ZADEH, BERNARD P.; Some Properties of Modified Dempster-Shafer Operators in Rule Based Inference Systems; No. 4, pp. 345-356.

ZELENÝ, MILAN; Tectology; No. 4, pp. 331-343.

ZELENÝ, MILAN; see KLIR, GEORGE J.

ZHAO, QUNFEI; see TAKAHARA, YASUHIKO.

ZIEGENHAGEN, EDUARD A.; review of *The Shaping of Social Organization: Rule System Theory with Applications*, written by Tom Burns and Helena Flam; No. 3, pp. 280-281.

SUBJECT INDEX

APPROXIMATE REASONING; see KLIR, GEORGE J.
BEHAVIOR, CHANGES IN; see SAITO, TOSHIO.
BIOLOGICAL OBJECTS; see MAJERNIK, VLADIMIR.
CHANGE IN SYSTEM BEHAVIOR; see SAITO TOSHIO.
COMPLEX SYSTEMS; see TAKAHARA, YASUHIKO.
COMPLEXITY; see KLIR, GEORGE J.
CONTROL, APPROXIMATE REASONING IN; see KLIR, GEORGE J.
CONTROL ENCYCLOPEDIA; see KAYE, MARLENE M.
CYBERNETICS; see JOSLYN, CLIFF.
DECISION, APPROXIMATE REASONING IN; see KLIR, GEORGE J.
DECOMPOSITION PROBLEM; see KOŁODZIEJCZYK, WALDEMAR.
DEMPSSTER-SHAFER THEORY; see ZEIGLER, BERNARD P.
DEPENDENCY ANALYSIS, EXTENDED; see CONANT, ROGER C.
DYNAMICAL SYSTEMS; see SKOWRONSKI, J. M.
ENTROPY; see LAMATA, MARIA T.
EVIDENCE THEORY; see LAMATA, MARIA T.
FEEDBACK, OUTPUT; see SAITO, TOSHIO
FINITE ELEMENT METHOD; see CHRISTENSEN, RONALD.
FUZZY ALGORITHMS; see KLIR, GEORGE J.
FUZZY RELATIONS; see KOŁODZIEJCZYK, WALDEMAR.
FUZZY SET THEORY; see OBLOW, E. M.
FUZZY SETS; see NOWAKOWSKA, MARIA.
GENERAL SYSTEMS; see LIN, YI.
GENERAL SYSTEMS; see MAJERNIK, VLADIMIR.
HIERARCHICAL SYSTEMS; see TAKAHARA, YASUHIKO.
HIERARCHY OF SYSTEMS; see LIN, YI.
INFERENCE SYSTEMS; see ZEIGLER, BERNARD P.
INFORMATION THEORY; see KLIR, GEORGE J.
INFORMATION THEORY; see NOWAKOWSKA, MARIA.
INTELLIGENT SYSTEMS, APPROXIMATE REASONING IN; see KLIR, GEORGE J.
KEPLER THIRD LAW; see OLDERSHAW, ROBERT L.
KNOWLEDGE; see KELLY, MICHAEL F.
KNOWLEDGE, NONMONOTONIC; see YAGER, RONALD R.
KNOWLEDGE REPRESENTATION; see KLIR, GEORGE J.
LEARNING AUTOMATA; see THATACHAR, M. A. L.
LINEAR SYSTEMS; see SKOWRONSKI, J. M.
LOGIC, FOR SYSTEMS MODELLING; see KLIR, GEORGE J.
MANAGEMENT; see JOSLYN, CLIFF.
MECHANICS, APPLIED; see FARSHAD, MEHDI.
MEDICINE; see KLIR, GEORGE J.
METABOLISM-REPAIR SYSTEMS; see CASTI, JOHN L.
NETWORKS; see CHRISTENSEN, RONALD.
NONLINEAR SYSTEMS; see SKOWRONSKI, J. M.
 O -THEORY; see OBLOW, E. M.
OSMOTIC GROWTH; see KLIR, GEORGE J.
POSSIBILITY THEORY; see KLIR, GEORGE J.
QUALITY CONTROL; see ISHIZU, SYOHEI.
REPRESENTATION, A SYSTEM MODEL OF; see GORMLAY, LANE.
RULE SYSTEM THEORY; see ZIEGENHAGEN, EDUARD A.
RYDBERG ATOMS; see OLDERSHAW, ROBERT L.
SOCIAL ORGANIZATION; see ZIEGENHAGEN, EDUARD A.
SPEECH, COMPUTER MODELS OF; see KLIR, GEORGE J.
STABILITY OF SYSTEMS; see LIN, YI.
STATISTICS; see KLIR, GEORGE J.
SYSTEMS ENCYCLOPEDIA; see KAYE, MARLENE M.
SYSTEMS MODELLING; see KLIR, GEORGE J.
SYSTEMS SCIENCE; see KLIR, GEORGE J.

TECTOLOGY; see ZELENY, MILAN.
TREE HIERARCHY; see LIN YI.
UNCERTAINTY; see KLIR, GEORGE J.
UNCERTAINTY; see NOWAKOWSKA, MARIA.
VARIABLE STARS; see OLDERSHAW, ROBERT L.
WALKING, CONTROL OF; see KLIR, GEORGE J.

